

Liberty Ultra Product Comparison

Janesville, WI 2024

Trial Information

Trial Sponsor: BASF

Objective: Compare the efficacy of ***Liberty ULTRA** to other formulations of glufosinate

Crop: Soybean

Hybrid: NK22-C4E3

Weed species (pressure): giant ragweed (moderate-high)
common lambsquarters (moderate)

Herbicide Application(s): PRE – 5/15
POST – 6/11 (V1/V2 soybean)

***Liberty ULTRA** is a new formulation of glufosinate (Liberty 280 SL) powered by Glu-L™ Technology offered by BASF. 24 fl oz of Liberty ULTRA is equivalent to 32 fl oz of Liberty

For the full report see trial #24-ROK-SB05 in the [2024 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

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Trt # Herbicide (rate acre ⁻¹)	Injury ^b (%)		AMBTR ^c (%)			CHEAL ^c (%)		
	6 DAT	14 DAT	14 DAT	20 DAT	27 DAT	14 DAT	20 DAT	27 DAT
1 Untreated Check	0	0	0	0	0	0	0	0
Two-Pass – PRE (5/24) <i>fb</i> POST (6/27)								
2 Dual II Magnum (10.6 oz) <i>fb</i> Liberty ULTRA (24 oz)	0.0	0	89	85	75	94	93	87
3 Dual II Magnum (10.6 oz) <i>fb</i> Surmise 5 (16.4 oz)	0.0	0	91	91	79	78	76	53
4 Dual II Magnum (10.6 oz) <i>fb</i> Interline (32 oz)	4.3	0	92	91	80	88	87	78
5 Dual II Magnum (10.6 oz) <i>fb</i> Liberty ULTRA (24 oz) + AMS (3 lb)	0.0	0	93	88	82	94	92	87
6 Dual II Magnum (10.6 oz) <i>fb</i> Surmise 5 (16.4 oz) + AMS (3 lb)	2.0	0	93	93	85	76	74	52
7 Dual II Magnum (10.6 oz) <i>fb</i> Interline (32 oz) + AMS (3 lb)	4.5	0	95	92	84	89	90	82
8 Zidua PRO (6 oz) <i>fb</i> Liberty ULTRA (24 oz) + RU PM3 (30 oz)+Zidua SC (2.5 fl oz)+AMS (3 lb)	3.3	0	98	96	90	100	100	100
		LSD ($\alpha=0.10$)	0.4	ns	2	3	5	5
		p value	<.001	ns	<.001	<.001	<.001	<.001

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

^bSoybean injury symptoms 6 DAT = leaf chlorosis

^cAMBTR = giant ragweed; CHEAL = common lambsquarters

Weed Size Day of Preplant Burndown Application



Weed Size Day of Preplant Burndown Application



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Plot pictures taken on 6/17
6 days after the POST application

6 days after POST (6/17)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 32 oz Interline



4% soybean leaf chlorosis

6 days after POST (6/17)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 32 oz Interline + AMS



4% soybean leaf chlorosis

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Plot pictures taken on 6/25
14 days after the POST application

The numbers in the upper right-hand corner are the average % giant ragweed and lambsquarters control of 4 replications

14 days after POST (6/25)

Untreated Check

0%



14 days after POST (6/25)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 24 oz Liberty ULTRA

G. Ragweed = 89%
Lambsquarters = 94%



14 days after POST (6/25)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 16.4 oz Surmise 5

G. Ragweed = 91%
Lambsquarters = 78%



14 days after POST (6/25)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 32 oz Interline

G. Ragweed = 92%
Lambsquarters = 88%



14 days after POST (6/25)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 24 oz Liberty ULTRA + AMS

G. Ragweed = 93%
Lambsquarters = 94%



14 days after POST (6/25)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 16.4 oz Surmise 5 + AMS

G. Ragweed = 93%
Lambsquarters = 76%



14 days after POST (6/25)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 32 oz Interline + AMS

G. Ragweed = 95%
Lambsquarters = 89%



14 days after POST (6/25)

G. Ragweed = 98%

PRE: 6 oz Zidua PRO *fb*

Lambsquarters = 100%

POST: 24 oz Liberty ULTRA + 30 oz RU PM3 + 2.5 oz Zidua SC + AMS



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Plot pictures taken on 7/1
20 days after the POST application

The numbers in the upper right-hand corner are the average % giant ragweed and lambsquarters control of 4 replications

20 days after POST (7/1)
Untreated Check

0%



20 days after POST (7/1)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 24 oz Liberty ULTRA

G. Ragweed = 85%
Lambsquarters = 93%



20 days after POST (7/1)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 16.4 oz Surmise 5

G. Ragweed = 91%
Lambsquarters = 76%



20 days after POST (7/1)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 32 oz Interline

G. Ragweed = 91%
Lambsquarters = 87%



20 days after POST (7/1)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 24 oz Liberty ULTRA + AMS

G. Ragweed = 88%
Lambsquarters = 92%



20 days after POST (7/1)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 16.4 oz Surmise 5 + AMS

G. Ragweed = 93%
Lambsquarters = 74%



20 days after POST (7/1)
PRE: 10.6 oz Dual II Magnum fb
POST: 32 oz Interline + AMS

G. Ragweed = 92%
Lambsquarters = 90%



20 days after POST (7/1)

PRE: 6 oz Zidua PRO fb

POST: 24 oz Liberty ULTRA + 30 oz RU PM3 + 2.5 oz Zidua SC + AMS

G. Ragweed = 96%

Lambsquarters = 100%



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Plot pictures taken on 7/8
27 days after the POST application

The numbers in the upper right-hand corner are the average % giant ragweed and lambsquarters control of 4 replications

27 days after POST (7/8)
Untreated Check

0%



27 days after POST (7/8)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 24 oz Liberty ULTRA

G. Ragweed = 75%
Lambsquarters = 87%



27 days after POST (7/8)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 16.4 oz Surmise 5

G. Ragweed = 79%
Lambsquarters = 53%



27 days after POST (7/8)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 32 oz Interline

G. Ragweed = 80%
Lambsquarters = 78%



27 days after POST (7/8)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 24 oz Liberty ULTRA + AMS

G. Ragweed = 82%
Lambsquarters = 87%



27 days after POST (7/8)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 16.4 oz Surmise 5 + AMS

G. Ragweed = 85%
Lambsquarters = 52%



27 days after POST (7/8)
PRE: 10.6 oz Dual II Magnum *fb*
POST: 32 oz Interline + AMS

G. Ragweed = 84%
Lambsquarters = 82%



27 days after POST (7/8)

PRE: 6 oz Zidua PRO fb

POST: 24 oz Liberty ULTRA + 30 oz RU PM3 + 2.5 oz Zidua SC + AMS

G. Ragweed = 90%

Lambsquarters = 100%

